

ABSTRACT OF THE DISCLOSURE

The invention relates to a system for adaptation/optimization of the speed of a rotating electric machine included in the system, wherein the machine is intended to be directly connected to a distribution or transmission network. The machine has at least two electric windings, each of which is formed from at least one electric conductor, a first semiconducting layer arranged surrounding the conductor, an insulating layer arranged surrounding the first semiconducting layer, and a second semiconducting layer arranged surrounding the insulating layer. In addition, the system is configured to generate a resultant stator and air gap flux of the machine during operation, wherein the flux is composed of at least two vectorial quantities.